



# Practice

## 5.2 Introduction to Solving Quadratic Equations

Solve each equation. Give both exact solutions and approximate solutions to the nearest hundredth.

1.  $x^2 = 100$

\_\_\_\_\_

2.  $12x^2 = 36$

\_\_\_\_\_

3.  $(x + 3)^2 = 81$

\_\_\_\_\_

4.  $5x^2 - 4 = 96$

\_\_\_\_\_

5.  $x^2 - 12 = 4$

\_\_\_\_\_

6.  $6x^2 + 15 = 23$

\_\_\_\_\_

7.  $4x^2 - 9 = 17$

\_\_\_\_\_

8.  $12 = 4(x - 2)^2 - 8$

\_\_\_\_\_

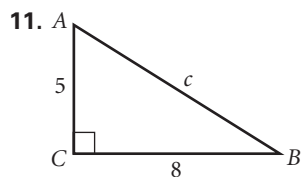
9.  $14 = 0.5x^2 + 5$

\_\_\_\_\_

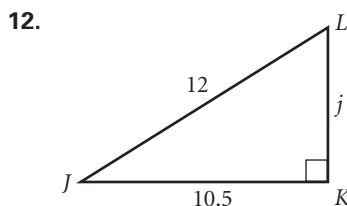
10.  $7(x + 1)^2 = 161$

\_\_\_\_\_

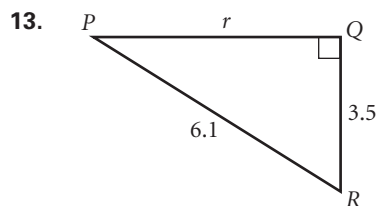
Find the unknown length in each right triangle. Round answers to the nearest tenth.



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_

Find the missing side length in right triangle  $ABC$ . Round answers to the nearest tenth.

14.  $a = 15$  and  $b = 7$  \_\_\_\_\_

15.  $a = 2.4$  and  $c = 7.3$  \_\_\_\_\_

16.  $b = 2$  and  $c = \sqrt{10}$  \_\_\_\_\_

17.  $a = 9.1$  and  $b = 7$  \_\_\_\_\_

